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ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/6 4/2
19701A 6SRS, MISSILE NUMBER 022, ROUND NUMBER B-21. 5 JULY 1979--ETC(U)
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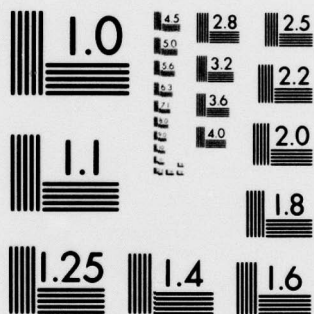
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METEOROLOGICAL DATA REPORT

19701A GMS
Missile No. 022
Round No. 2-31
3 July 1979

by

White Sands Meteorological Team

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ATMOSPHERIC SCIENCE LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM

UNITED STATES ARMY RESEARCH OFFICE

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| REPORT DOCUMENTATION PAGE | | READ INSTRUCTIONS BEFORE COMPLETING FORM |
|--|-----------------------|---|
| 1. REPORT NUMBER DR 1040 | 2. GOVT ACCESSION NO. | 3. RECIPIENT'S CATALOG NUMBER |
| 4. TITLE (and Subtitle) 19701A GSRS, MISSILE NUMBER 022, ROUND NUMBER B-21, 5 July 1979 | | 5. TYPE OF REPORT & PERIOD COVERED |
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| 19. KEY WORDS (Continue on reverse side if necessary and identify by block number) 1. Ballistics 2. Meteorology 3. Wind | | |
| 20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of 19701A GSRS, Missile Number 022, Round Number B-21, are presented in tabular form. 470 663 | | |

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| | |
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INTRODUCTION

19701A GSRS, Missile Number 022, Round Number B-21, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1030 MDT, 5 July 1979. The scheduled launch time was 1030 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

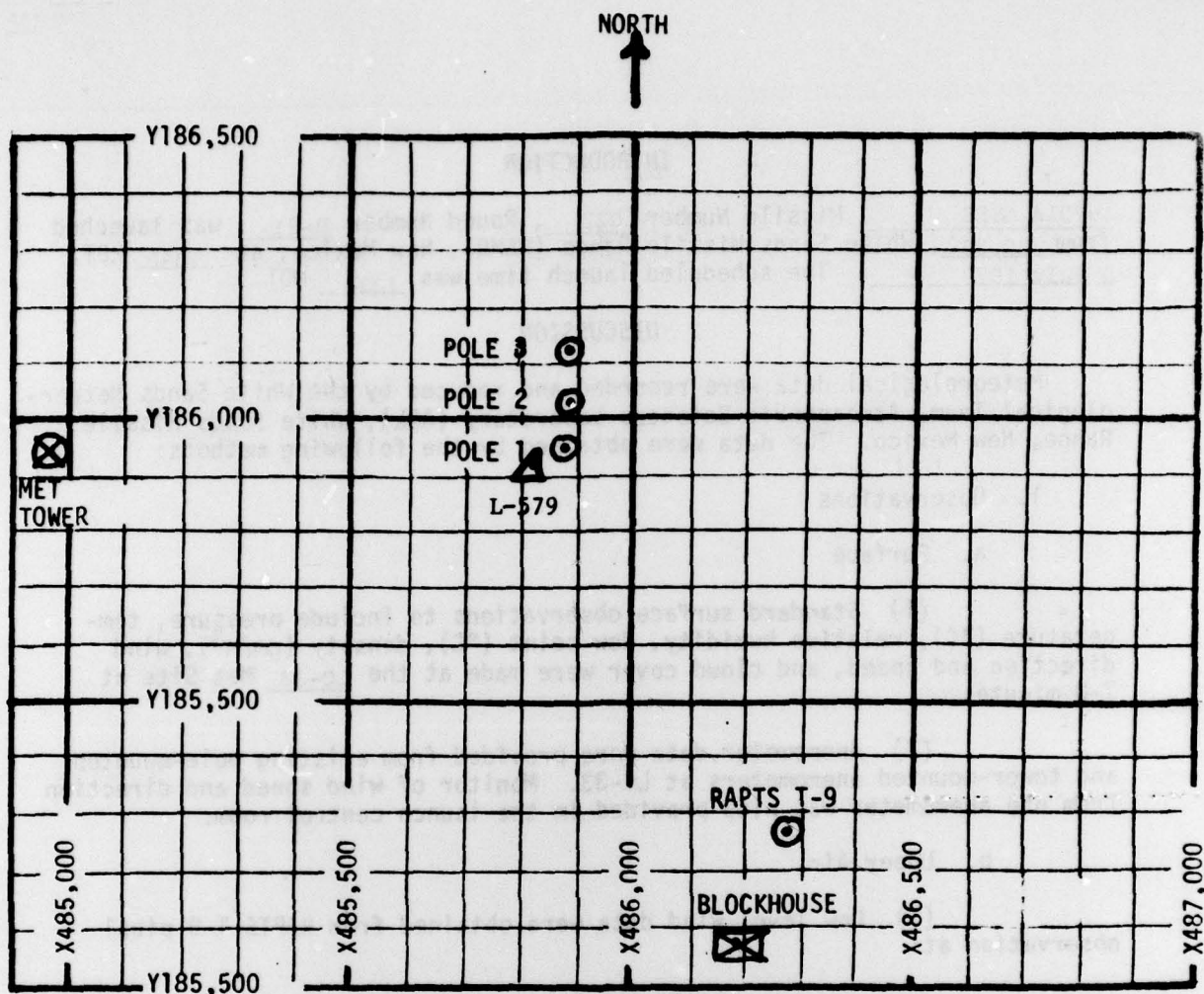
SITE AND ALTITUDE

| | | |
|-------|-------------|----------|
| LC-33 | 1080 meters | 1020 MDT |
| LC-33 | 1080 meters | 1030 MDT |

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 27,500 feet in 500-foot increments.

SITE AND TIME

SMR 0900 MST



1. MET TOWER - 4 Bendix Model T-120 Anemometers at 12 ft, 62 ft, 102 ft and 202 ft with E/A recorders.
2. POLE ANEMOMETER - Bendix Model T-120 with E/A recorders.
 - (a) Pole #1 - 38.7 ft
 - (b) Pole #2 - 53.0 ft
 - (c) Pole #3 - 83.6 ft
3. RAPTS T-9 Radar Automatic Pilot-Balloon Tracking System T-9 Radar.

TABLE 1. Surface Observation taken at LC-33
5 July 1979 at 1030 MDT, 19701A GSRS,
Missile No. 022, Round No. B-21.

| | | |
|-------------------|---------|-------------------|
| ELEVATION | 3977.30 | FT/MSL |
| PRESSURE | 883.6 | MBS |
| TEMPERATURE | 26.0 | °C |
| RELATIVE HUMIDITY | 40 | % |
| DEW POINT | 11.4 | °C |
| DENSITY | 1021 | GM/M ³ |
| WIND SPEED | CALM | MPH |
| WIND DIRECTION | | DEGREES |
| CLOUD COVER | CLEAR | |

TABLE 2. LC-33 FIXED POLE ANEMOMETER-MEASURED WINDS

| POLE #1 | | | POLE #2 | | | POLE #3 | | |
|---------------|------------|--------------|---------------|------------|--------------|---------------|------------|--------------|
| T-TIME SEC | DIR DEG | SPEED MPH | T-TIME SEC | DIR DEG | SPEED MPH | T-TIME SEC | DIR DEG | SPEED MPH |
| -30 | 326 | M | -30 | 329 | 02 | -30 | 006 | 07 |
| -20 | 353 | M | -20 | 339 | 03 | -20 | 344 | 05 |
| -10 | 332 | M | -10 | 360 | 02 | -10 | 012 | 04 |
| 0.0 | 336 | M | 0.0 | 351 | 02 | 0.0 | 005 | 02 |
| +10 | 330 | M | +10 | 339 | 01 | +10 | 017 | 01 |

Type 19701A GSRS, Missile No. 022, Round No. B-21 launched
from LC-33 on 5 July 1979 at 1030 MDT.

POLE #1 = X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL

POLE #2 = X485,874.93 Y186,012.00 H4033.57 53.0 ft. AGL

POLE #3 = X485,877.29 Y186,116.06 H4063.92 83.6 ft. AGL

NOTE: Wind directions are referenced to the firing azimuth _____
or true north true north.

TABLE 3. LC-33 METEOROLOGICAL TOWER ANEMOMETER-MEASURED WINDS (202 FT. TOWER)

| LEVEL #1 12 ft. | | | LEVEL #2 62 ft. | | |
|---------------------|------------|--------------|---------------------|------------|--------------|
| T-TIME SEC | DIR DEG | SPEED MPH | T-TIME SEC | DIR DEG | SPEED MPH |
| -30 | 360 | 03 | -30 | 002 | 02 |
| -20 | 359 | 02 | -20 | 360 | 02 |
| -10 | 353 | 01 | -10 | 003 | 01 |
| 0.0 | 000 | 00 | 0.0 | 015 | 01 |
| +10 | 000 | 00 | +10 | 000 | 00 |
| LEVEL #3 102 ft. | | | LEVEL #4 202 ft. | | |
| T-TIME SEC | DIR DEG | SPEED MPH | T-TIME SEC | DIR DEG | SPEED MPH |
| -30 | 000 | 00 | -30 | 003 | 02 |
| -20 | 000 | 00 | -20 | 004 | 02 |
| -10 | 000 | 00 | -10 | 357 | 01 |
| 0.0 | 000 | 00 | 0.0 | 000 | 00 |
| +10 | 000 | 00 | +10 | 326 | 01 |

WTSM Coordinates: X484,982.64 Y185,957.73 H3983.00 (base)

Type 19701A GSRS, Missile No. 022, Round No. B-21 launched
from LC-33 on 5 July 1979 at 1030 MDT.

NOTE: Wind directions are referenced to the firing azimuth _____
or true north true north.

TABLE 4. PILOT-BALLOON-MEASURED WIND DATA (30-METER INCREMENTS)

| HEIGHT METERS AGL | DIRECTION DEGREES | SPEED MPH |
|-------------------------|----------------------|--------------|
| SFC | CALM | |
| 30 | 039 | 0.5 |
| 60 | 077 | 0.5 |
| 90 | 115 | 1.0 |
| 120 | 153 | 1.0 |
| 150 | 110 | 2.0 |
| 180 | 066 | 2.5 |
| 210 | 022 | 3.5 |
| 240 | 338 | 4.0 |
| 270 | 344 | 5.5 |
| 300 | 350 | 7.0 |
| 330 | 356 | 8.5 |
| 360 | 002 | 9.5 |

| HEIGHT METERS AGL | DIRECTION DEGREES | SPEED MPH |
|-------------------------|----------------------|--------------|
| 390 | 004 | 9.0 |
| 420 | 005 | 8.0 |
| 450 | 006 | 7.0 |
| 480 | 007 | 6.0 |
| 510 | 014 | 6.0 |
| 540 | 018 | 20.0 |
| 570 | 026 | 6.0 |
| 600 | 032 | 5.5 |
| 630 | 033 | 5.5 |
| 660 | 034 | 5.0 |
| 690 | 035 | 5.0 |
| 720 | 035 | 4.5 |
| 750 | 027 | 4.0 |

Release Point Coordinates (WSTM): X486,037.24 Y486,037.24 H3977.30

Released from LC-33 on 5 July 1979 at 1020 MDT.

Type 19701A GSRS, Missile No. 022, Round No. B-21 launched from LC-33 on 5 July 1979 at 1030 MDT.

NOTE: Wind directions are referenced to the firing azimuth or true north true north.

| HEIGHT METERS AGL | DIRECTION DEGREES | SPEED MPH |
|-------------------------|----------------------|--------------|
| 780 | 018 | 3.5 |
| 810 | 009 | 3.0 |
| 840 | 360 | 2.0 |
| 870 | 350 | 3.0 |
| 900 | 340 | 4.0 |
| 930 | 330 | 5.0 |
| 960 | 320 | 5.5 |
| 990 | 321 | 6.5 |
| 1020 | 321 | 7.0 |
| 1050 | 321 | 8.0 |
| 1080 | 321 | 8.5 |
| 1110 | | |
| 1140 | | |
| 1170 | | |
| 1200 | | |
| 1230 | | |
| 1260 | | |
| 1290 | | |
| 1320 | | |
| 1350 | | |
| 1380 | | |
| 1410 | | |

| HEIGHT METERS AGL | DIRECTION DEGREES | SPEED MPH |
|-------------------------|----------------------|--------------|
| 1440 | | |
| 1470 | | |
| 1500 | | |
| 1530 | | |
| 1560 | | |
| 1590 | | |
| 1620 | | |
| 1650 | | |
| 1680 | | |
| 1710 | | |
| 1740 | | |
| 1770 | | |
| 1800 | | |
| 1830 | | |
| 1860 | | |
| 1890 | | |
| 1920 | | |
| 1950 | | |
| 1980 | | |
| 2010 | | |
| 2040 | | |
| 2070 | | |

TABLE 5. PILOT-BALLOON-MEASURED WIND DATA (30-METER INCREMENTS)

| HEIGHT METERS AGL | DIRECTION DEGREES | SPEED MPH |
|-------------------------|----------------------|--------------|
| SFC | CALM | |
| 30 | 340 | 0.5 |
| 60 | 320 | 1.0 |
| 90 | 300 | 1.5 |
| 120 | 280 | 1.5 |
| 150 | 312 | 2.0 |
| 180 | 343 | 2.0 |
| 210 | 014 | 2.5 |
| 240 | 045 | 2.5 |
| 270 | 039 | 3.0 |
| 300 | 032 | 3.5 |
| 330 | 025 | 4.0 |
| 360 | 018 | 4.5 |

| HEIGHT METERS AGL | DIRECTION DEGREES | SPEED MPH |
|-------------------------|----------------------|--------------|
| 390 | 015 | 5.5 |
| 420 | 012 | 6.0 |
| 450 | 009 | 6.5 |
| 480 | 006 | 7.0 |
| 510 | 012 | 7.0 |
| 540 | 017 | 7.0 |
| 570 | 022 | 7.0 |
| 600 | 027 | 6.5 |
| 630 | 029 | 6.0 |
| 660 | 030 | 5.0 |
| 690 | 032 | 4.5 |
| 720 | 033 | 3.5 |
| 750 | 030 | 4.0 |

Release Point Coordinates (WSTM): X486,037.24 Y486,037.24 H3977.30

Released from LC-33 on 5 July 1979 at 1030 MDT.Type 19701A GSRS, Missile No. 022, Round No. B-21 launched
from LC-33 on 5 July 1979 at 1030 MDT.NOTE: Wind directions are referenced to the firing azimuth _____
or true north true north.

| HEIGHT METERS AGL | DIRECTION DEGREES | SPEED MPH |
|-------------------------|----------------------|--------------|
| 780 | 026 | 4.5 |
| 810 | 022 | 5.0 |
| 840 | 018 | 5.5 |
| 870 | 008 | 5.5 |
| 900 | 358 | 5.0 |
| 930 | 348 | 5.0 |
| 960 | 337 | 4.5 |
| 990 | 335 | 5.5 |
| 1020 | 332 | 6.0 |
| 1050 | 330 | 6.5 |
| 1080 | 327 | 7.0 |
| 1110 | | |
| 1140 | | |
| 1170 | | |
| 1200 | | |
| 1230 | | |
| 1260 | | |
| 1290 | | |
| 1320 | | |
| 1350 | | |
| 1380 | | |
| 1410 | | |

| HEIGHT METERS AGL | DIRECTION DEGREES | SPEED MPH |
|-------------------------|----------------------|--------------|
| 1440 | | |
| 1470 | | |
| 1500 | | |
| 1530 | | |
| 1560 | | |
| 1590 | | |
| 1620 | | |
| 1650 | | |
| 1680 | | |
| 1710 | | |
| 1740 | | |
| 1770 | | |
| 1800 | | |
| 1830 | | |
| 1860 | | |
| 1890 | | |
| 1920 | | |
| 1950 | | |
| 1980 | | |
| 2010 | | |
| 2040 | | |
| 2070 | | |

STATION ALTITUDE 5929.00 FEET MSL
5 JULY 79 0700 HRS MST
ASCENSION NO. 507

SIGNIFICANT LEVEL DATA

1250020007
WHITE SANDS

GEODETTIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

| PRESSURE | GEOMETRIC ALTITUDE MILLIBARS MSL FEET | TEMPERATURE AIR DEGREES CENTIGRADE | REL. HUM. PERCENT |
|----------|---|--|----------------------|
| 883.9 | 3969.0 | 24.3 | 33.0 |
| 850.0 | 5105.3 | 20.3 | 43.0 |
| 840.2 | 5433.5 | 19.1 | 44.0 |
| 817.0 | 6223.4 | 18.4 | 49.0 |
| 772.8 | 7797.3 | 17.5 | 32.0 |
| 717.0 | 9872.2 | 12.4 | 50.0 |
| 709.0 | 10531.9 | 10.6 | 46.0 |
| 681.2 | 11275.9 | 9.2 | 47.0 |
| 656.4 | 13114.0 | 4.1 | 59.0 |
| 619.0 | 13854.4 | 2.7 | 70.0 |
| 593.4 | 14973.2 | -4 | 79.0 |
| 576.8 | 15719.3 | -1.4 | 60.0 |
| 560.6 | 16094.9 | -1.6 | 67.0 |
| 560.2 | 16465.1 | -1.1 | 32.0 |
| 527.8 | 18038.3 | -4.4 | 33.0 |
| 500.0 | 19432.9 | -7.1 | 14.0 |
| 465.6 | 21245.3 | -11.5 | 13.0 |
| 454.5 | 21653.3 | -11.4 | 13.0 |
| 429.0 | 23259.9 | -15.2 | 13.0 |
| 400.0 | 25032.4 | -17.5 | 13.0 |
| 359.8 | 27605.0 | -24.9 | 14.0 |

STATION ALTITUDE 3989.00 FEET MSL
 5 JULY 79
 ASCENSION NO. 307

UPPER AIR DATA
 1050020307
 WHITE SANDS

GEODETTIC COORDINATES
 32.40043 LAT DEG
 106.37033 LON DEG

| GEOMETRIC ALTITUDE MSL FEET | PRESSURE MILLIBARS | TEMPERATURE AIR DEGREES CELSIUS | REL. HUM. PERCENT | DENSITY GRAMS/CUBIC METER | SPEED OF SOUND M/S | WIND DATA DIRECTION DEGREES (T) | SPEED KNOTS | INDEX OF REFRACTION |
|--------------------------------|-----------------------|---------------------------------------|----------------------|---------------------------------|--------------------------|---------------------------------------|----------------|---------------------------|
| 3989.0 | 883.9 | 24.3 | 33.0 | 1030.8 | 673.3 | 40.0 | 1.9 | 1.000273 |
| 4000.0 | 883.6 | 24.3 | 33.1 | 1030.5 | 673.3 | 39.0 | 1.9 | 1.000273 |
| 4500.0 | 868.2 | 22.5 | 37.6 | 1018.0 | 671.3 | 31.8 | 2.1 | 1.000271 |
| 5000.0 | 853.1 | 20.7 | 42.1 | 1006.5 | 669.3 | 23.0 | 2.3 | 1.000269 |
| 5500.0 | 838.2 | 19.0 | 44.4 | 995.0 | 667.4 | 19.3 | 2.5 | 1.000265 |
| 6000.0 | 823.5 | 18.6 | 47.6 | 978.7 | 667.0 | 14.0 | 2.7 | 1.000264 |
| 6500.0 | 809.0 | 18.2 | 46.0 | 962.8 | 666.5 | 4.7 | 3.1 | 1.000258 |
| 7000.0 | 794.7 | 18.0 | 40.6 | 947.3 | 666.0 | 33.0 | 4.9 | 1.000248 |
| 7500.0 | 780.7 | 17.7 | 35.1 | 932.0 | 665.5 | 32.0 | 6.8 | 1.000240 |
| 8000.0 | 760.9 | 17.0 | 33.8 | 917.9 | 664.7 | 32.4 | 8.2 | 1.000234 |
| 8500.0 | 753.3 | 15.9 | 38.2 | 905.2 | 663.3 | 32.1 | 9.0 | 1.000233 |
| 9000.0 | 739.8 | 14.5 | 42.5 | 892.7 | 662.0 | 32.0 | 9.2 | 1.000231 |
| 9500.0 | 726.7 | 13.3 | 46.6 | 880.4 | 660.0 | 32.3 | 9.3 | 1.000229 |
| 10000.0 | 713.7 | 12.1 | 49.2 | 868.5 | 659.1 | 33.3 | 9.8 | 1.000226 |
| 10500.0 | 700.8 | 10.7 | 46.2 | 857.4 | 657.4 | 34.7 | 10.2 | 1.000219 |
| 11000.0 | 688.1 | 9.7 | 46.6 | 844.8 | 656.2 | 4.4 | 9.9 | 1.000215 |
| 11500.0 | 673.6 | 8.6 | 49.7 | 832.0 | 654.9 | 20.8 | 10.3 | 1.000212 |
| 12000.0 | 663.2 | 7.2 | 55.7 | 821.5 | 653.3 | 37.3 | 9.9 | 1.000210 |
| 12500.0 | 651.0 | 5.6 | 61.7 | 810.3 | 651.7 | 31.9 | 10.3 | 1.000208 |
| 13000.0 | 639.1 | 4.4 | 67.6 | 799.4 | 650.1 | 47.9 | 10.6 | 1.000206 |
| 13500.0 | 627.3 | 3.4 | 71.7 | 787.7 | 648.9 | 44.0 | 11.0 | 1.000202 |
| 14000.0 | 615.6 | 2.3 | 79.0 | 776.1 | 647.0 | 34.4 | 11.1 | 1.000199 |
| 14500.0 | 604.1 | .9 | 75.2 | 765.5 | 645.9 | 23.0 | 11.5 | 1.000195 |
| 15000.0 | 592.8 | -.4 | 79.7 | 755.0 | 644.3 | 23.3 | 11.6 | 1.000192 |
| 15500.0 | 581.6 | -1.1 | 70.3 | 742.6 | 643.3 | 24.7 | 10.8 | 1.000188 |
| 16000.0 | 570.7 | -1.5 | 70.3 | 730.1 | 642.9 | 24.2 | 8.1 | 1.000182 |
| 16500.0 | 559.9 | -1.1 | 72.0 | 718.2 | 642.3 | 19.4 | 5.1 | 1.000169 |
| 17000.0 | 549.2 | -2.2 | 72.0 | 705.3 | 641.0 | 327.0 | 2.4 | 1.000166 |
| 17500.0 | 538.8 | -3.3 | 72.0 | 694.7 | 640.4 | 273.0 | 3.7 | 1.000163 |
| 18000.0 | 528.6 | -4.3 | 72.0 | 684.2 | 639.1 | 233.4 | 4.8 | 1.000160 |
| 18500.0 | 518.4 | -5.3 | 72.0 | 673.7 | 637.9 | 297.2 | 5.9 | 1.000156 |
| 19000.0 | 508.5 | -6.3 | 72.0 | 663.3 | 636.0 | 309.0 | 7.2 | 1.000152 |
| 19500.0 | 498.7 | -7.3 | 72.0 | 653.1 | 635.4 | 311.5 | 6.3 | 1.000148 |
| 20000.0 | 489.0 | -8.5 | 72.0 | 643.4 | 633.9 | 309.9 | 9.3 | 1.000146 |
| 20500.0 | 479.5 | -9.7 | 72.0 | 633.6 | 632.4 | 300.7 | 9.8 | 1.000143 |
| 21000.0 | 470.1 | -10.3 | 72.0 | 624.3 | 631.0 | 291.4 | 10.4 | 1.000141 |
| 21500.0 | 460.9 | -11.5 | 72.0 | 613.4 | 630.3 | 270.0 | 11.4 | 1.000138 |
| 22000.0 | 451.9 | -11.8 | 72.0 | 602.4 | 629.7 | 270.0 | 12.5 | 1.000136 |
| 22500.0 | 442.9 | -13.1 | 72.0 | 593.2 | 629.3 | 270.0 | 12.5 | 1.000134 |
| 23000.0 | 434.2 | -14.4 | 72.0 | 584.4 | 629.7 | 270.0 | 13.1 | 1.000132 |

| STATION ALTITUDE 3969.00 FEET MSL 5 JULY 79 0900 MRS MST ASCENSION NO. 307 | | | | UPPER AIR DATA 100020307 WHITE SANDS | | | | GEODETIC COORDINATES 32.40043 LAT DEG 106.37033 LON DEG | | | |
|--|-----------------------|--|----------------------|--|----------------------------|--|----------------|---|--|--|--|
| GEOMETRIC ALTITUDE MSL FEET | PRESSURE MILLIBARS | TEMPERATURE AIR DEGREES DEWPOINT CENTIGRADE | REL. HUM. PERCENT | DENSITY GM/CUBIC METER | SPEED OF SOUND KNOTS | WIND DATA DIRECTION DEGREES (TR) | SPEED KNOTS | INDEX OF REFRACTION | | | |
| 23500.0 | 425.5 | -15.5 | 13.0 | 575.2 | 623.4 | 270.0 | 13.5 | 1.000129 | | | |
| 24000.0 | 417.0 | -16.1 | 13.0 | 565.1 | 624.0 | 269.9 | 13.6 | 1.000127 | | | |
| 24500.0 | 408.7 | -16.8 | 13.0 | 555.3 | 623.8 | 269.4 | 14.0 | 1.000125 | | | |
| 25000.0 | 400.5 | -17.5 | 13.0 | 545.6 | 623.0 | 269.6 | 13.5 | 1.000123 | | | |
| 25500.0 | 392.4 | -18.8 | 13.2 | 537.4 | 621.5 | 261.2 | 12.2 | 1.000121 | | | |
| 26000.0 | 384.4 | -20.3 | 13.4 | 529.8 | 619.5 | | | 1.000119 | | | |
| 26500.0 | 376.5 | -21.7 | 13.6 | 521.6 | 617.6 | | | 1.000117 | | | |
| 27000.0 | 368.9 | -23.2 | 13.8 | 514.0 | 615.0 | | | 1.000115 | | | |
| 27500.0 | 361.4 | -24.6 | 14.0 | 506.4 | 614.2 | | | 1.000114 | | | |

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STATION ALTITUDE 3449.00 FEET MSL
5 JULY 79
ASCENSION NO. 307

MANDATORY LEVELS
1560020307
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

| PRESSURE GEOPOTENTIAL | | TEMPERATURE | | REL. HUMID. PERCENT | WIND DATA | |
|-----------------------|--------|----------------|------------------------|------------------------|---------------------------|----------------|
| MILLIBARS | FEET | AIR DEGREES | DEWPOINT CENTIGRADE | | DIRECTION DEGREES (IN) | SPEED KNOTS |
| 850.0 | 5102. | 20.3 | 7.3 | 43. | 23.8 | 2.3 |
| 800.0 | 6810. | 18.1 | 5.2 | 43. | 345.7 | 4.1 |
| 750.0 | 8617. | 15.5 | 1.7 | 39. | 321.5 | 9.0 |
| 700.0 | 10521. | 10.6 | -5 | 40. | 345.3 | 10.2 |
| 650.0 | 12532. | 5.7 | -1.0 | 52. | 51.5 | 10.3 |
| 600.0 | 14064. | .4 | -3.2 | 77. | 20.2 | 11.5 |
| 550.0 | 16944. | -2.1 | -16.4 | 32. | 334.5 | 2.5 |
| 500.0 | 19405. | -7.1 | -30.0 | 14. | 311.5 | 8.2 |
| 450.0 | 22070. | -12.1 | -34.3 | 13. | 272.5 | 12.5 |
| 400.0 | 24990. | -17.5 | -39.2 | 13. | 265.5 | 13.4 |

STATION ALTITUDE 3939.00 FEET NSL
5 JULY 79 0300 HRS MST
ASCENSION NO. 507

ASR MANDATORY LEVELS
1500020007
WHITE SPRING

GEODETIC COORDINATES
32.40043 LAT DEG
105.37033 LONG DEG

| GEOPOTENTIAL ALTITUDE DECIMETERS | DIRECTION DEG (TN) | WIND DATA | | U-M MPS | TEMP DEG C | TEMPERATURE | | PRESSURE MILLIBARS |
|--|-----------------------|--------------|------------|------------|---------------|--------------|--------------|-----------------------|
| | | SPEED MPS | N-S MPS | | | AIR DEG C | SEA DEG C | |
| 704. | 266. | 7. | 1. | 7. | 22 | -17.5 | 4.000+2 | |
| 673. | 273. | 9. | -0. | 0. | 23 | -12.1 | 4.500+2 | |
| 591. | 312. | 4. | -3. | 3. | 29 | -7.1 | 5.000+2 | |
| 516. | 335. | 1. | -1. | 1. | 14 | -2.1 | 5.500+2 | |
| 447. | 26. | 6. | -5. | -3. | 04 | .4 | 6.000+2 | |
| 392. | 52. | 5. | -3. | -7. | 07 | 5.7 | 6.500+2 | |
| 321. | 348. | 5. | -3. | 1. | 11 | 10.6 | 7.000+2 | |
| 263. | 321. | 5. | -4. | 3. | 14 | 15.5 | 7.500+2 | |
| 206. | 346. | 2. | -2. | 1. | 19 | 18.1 | 8.000+2 | |
| 155. | 24. | 1. | -1. | -0. | 15 | 20.3 | 8.500+2 | |

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